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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,110	11/14/2003	Clemens Jung	IT20030039	1927

173 7590 07/16/2007
WHIRLPOOL PATENTS COMPANY - MD 0750
500 RENAISSANCE DRIVE - SUITE 102
ST. JOSEPH, MI 49085

EXAMINER

EL ARINI, ZEINAB

ART UNIT	PAPER NUMBER
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1746

MAIL DATE	DELIVERY MODE
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07/16/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/714,110	Applicant(s) JUNG ET AL.	
	Examiner Zeinab E. EL-Arini	Art Unit 1746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 March 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,8-10 and 12-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2 and 8-10, and 12-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>2-23-7</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The final rejection mailed on 11/23/05 and the examiner's answer mailed on 5/11/06 have been withdrawn in view of the decision by the board of patent appeal.

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 12, 2, 8-10, and 13-20 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 24, 2, 25-29, 31-32, 34-35, and 37-39 of copending Application No. 10/713,305. Although the conflicting claims are not identical, they are not patentably distinct from each other because the process as claimed in both applications is functionally equivalent.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2, 8-10, and 12-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bashark (3,888,269) in combination with Smith et al. (5,586,567).

Bashark discloses control system for dishwasher. The reference discloses that in Patent No. 3,279,481, a turbidity sensor is used to determine the turbidity of the rinse water. See col. 1, lines 60-67. The reference discloses sensing the turbidity of the dish treating liquid after the pump has been operating for a selecting period of time such as after one minute of the first rinse period. See col. 3, lines 3-20, and lines 49-68, and col. 4, lines 1-7, 36-46.

Bashark does not teach the steps and determining the solubility of the soil on the dishes as claimed.

Smith et al. teach a turbidity sensing mechanism for a dishwasher. The reference also discloses the turbidity is a measure of the suspended and/or soluble soils in the fluid. See col. 3, lines 51-52.

It would have been obvious for one skilled in the art to use the process taught by Bashark to obtain the claimed process, because the steps of measuring the turbidity as taught by Bashark will include determining the solubility of the soil as claimed. The steps as claimed are inherent in the Bashark process. This is also because the degree

of turbidity depends on the amount of soil been found on the dishes. See Bashark, col. 1, lines 54-59, and col. 3, lines 3-20. The turbidity which is a measure of the soluble soil in the liquid depend on the temperature, the time or the duration of the cleaning step, the volume of water, and the quantity of cleaning agent as claimed. This is also because an operator manual rinse of dishes (for example, using a water spray from a faucet) prior to selection of a preprogrammed operating cycle is a known prior art dishwashing method involving a determination of the solubility of soil on the dishes to be cleaned.

5. Claims 2, 8-10, and 12-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bashark (3,888,269) in combination with Smith et al. (5,586,567) and Morey et al (3,114,253).

Bashark discloses control system for dishwasher. The reference discloses that in Patent No. 3,279,481, a turbidity sensor is used to determine the turbidity of the rinse water. See col. 1, lines 60-67. The reference discloses sensing the turbidity of the dish treating liquid after the pump has been operating for a selecting period of time such as after one minute of the first rinse period. See col. 3, lines 3-20, and lines 49-68, and col. 4, lines 1-7, 36-46.

Bashark does not teach the steps and determining the solubility of the soil on the dishes as claimed.

Smith et al. teach a turbidity sensing mechanism for a dishwasher. The reference also discloses the turbidity is a measure of the suspended and/or soluble soils in the fluid. See col. 3, lines 51-52.

Morey et al. disclose that the rate of removal of soil from fabrics in a washing machine has a direct relationship to the rate of change of turbidity of the washing solution, and to utilize this knowledge to cause the washing operation to be terminated when the rate of change of turbidity approaches zero (See col. 11, lines 15-21), the reference also discloses that it will further be recognized that the washing of other articles may be made dependent upon the rate of change of turbidity of the washing solution (col. 11, lines 30-50, col. 9, line 64-col. 10, line 10).

It would have been obvious for one skilled in the art to use the process taught by Bashark to obtain the claimed process, because the steps of measuring the turbidity as taught by Bashark will include determining the solubility of the soil as claimed, see Bashark, col. 1, lines 54-59, or Morey et al. (See col. 11, lines 15-21, lines 30-50, and col. 9, line 64-col. 10, line 10). This is also because the degree of turbidity depends on the amount of soil been found on the dishes. See Bashark, col. 3, lines 3-20. The turbidity which is a measure of the soluble soil in the liquid depend on the temperature, the time or the duration of the cleaning step, the volume of water, and the quantity of cleaning agent as claimed.

Response to Arguments

6. Applicant's arguments with respect to claims 2, 8-10, 12-20 have been considered but are moot in view of the new ground(s) of rejection.

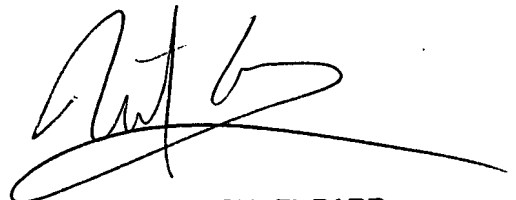
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zeinab E. EL-Arini whose telephone number is (571) 272-1301. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on (571) 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Zeinab E. EL-Arini
Primary Examiner
Art Unit 1746

ZEE
7/11/07



MICHAEL BARR
SUPERVISORY PATENT EXAMINER